

CLAIMS:

1. A high impact gate system including a lower reinforced elongated structure and an upper barrier means sized to extend across a roadway, and two spaced reinforcing means able to be positioned to at least partially overlap respective end portions of the elongated structure when the lower structure is in a closed position extending across the roadway, the reinforcing means able to provide supporting reinforcement to the elongated structure when receiving impact by vehicle or the like.
2. The high impact gate system of claim 1 wherein the lower structure is formed by two spaced linear members joined by cross bracing.
3. The high impact gate system of claim 2 wherein the spaced linear members extend substantially horizontally with the diagonal bracing being in a vertical cross section.
4. The high impact gate system of claim 3 wherein the spaced linear members are I-beams with the ends of the I-beams being parallel which together with plate sheeting form a front and back surface of the lower structure.
5. The high impact gate system of claim 4 wherein the bracing is cross diagonal bracing.
6. The high impact gate system of claim 5 wherein the cross bracing extends between internal vertices of the I-beams.
7. The high impact gate system of any one of the preceding claims including a cantilevered means having a foundation sized to be able to support the elongated lower structure in a cantilevered manner.
8. The high impact gate system of claim 7 wherein the lower structure includes a first end part mounted on a sliding mechanism mounted on an elongated foundation located in line and below the level of the lower structure and

adjacent the roadway wherein the distal second end of the elongated structure is cantilevered such that the second end can extend at least partially over the roadway to prevent unauthorized entry and the sliding mechanism allows sliding along the foundation out of the way for authorised entry along the roadway.

5

9. The high impact gate system of claim 8 wherein the first end part of the elongated structure is captively connected in a sliding manner to the reinforced base adjacent to the roadway to provide the cantilever foundation.

10

10. The high impact gate system of claim 9 wherein the sliding mechanism includes one or more rollers.

11. The high impact gate system of any one of the preceding claims wherein the two spaced reinforcing means comprise pairs of opposed buttresses able to be positioned to at least partially overlap respective end portions of the elongated structure and closely fit on opposing sides of lower structure when the gate in a closed position extending across the roadway, the reinforcing means able to provide supporting reinforcement to the elongated structure when receiving impact by vehicle or the like.

15

20

12. The high impact gate system of claim 11 wherein the buttresses are triangular buttresses.

25

13. The high impact gate system of claim 12 wherein each pair of opposing buttresses is mounted on a common base.

14. The high impact gate system of claim 13 wherein the common base of each pair of buttresses can be a weighty foundation means.

30

15. A high impact gate system including a lower structure and an upper section mounted on the lower structure, the lower structure sized to take the impact of a vehicle and the upper section providing a vertical barrier, the lower structure

formed by a boxed structure having two spaced linear structures joined by cross diagonal bracing to form a high impact barrier.

- 5 16. The high impact gate system of claim 9 wherein the spaced linear structures are "I" beams and extend substantially horizontally with the diagonal bracing being in a vertical cross section.
- 10 17. The high impact gate system of claim 9 or 10 wherein the lower structure includes a first end part mounted on a sliding mechanism and allowing the distal second end to be cantilevered such that the second end can extend at least partially over a roadway to prevent unauthorized entry and the sliding mechanism allows sliding out of the way for authorised entry along the roadway.
- 15 18. The high impact gate system of claim 11 wherein the sliding mechanism includes one or more ground engaging rollers.
- 20 19. The high impact gate system of claim 11 or 12 wherein the sliding mechanism is mounted on a reinforced base adjacent to the roadway.
- 25 20. A method of mounting a high impact gate, the method including
providing a gate including a lower structure sized to take the impact of a vehicle, the lower structure formed by two spaced linear structures joined by cross bracing to form a high impact barrier;
providing two sets of buttresses on either side of a roadway upon which high security authorized access is required;
mounting the gate on a sliding mechanism extending between the two sets of buttresses such that the buttresses provide a strengthening aid for the high impact gate when the lower structure is struck and the buttresses provide
30 a linear control of the sliding mechanism.
21. A method of mounting a high impact gate in accordance with claim 20 wherein two sets of buttresses comprise pairs of opposed buttresses able to be

positioned to at least partially overlap respective end portions of the elongated structure and closely fit on opposing sides of lower structure when the gate in a closed position extending across the roadway, the reinforcing means able to provide supporting reinforcement to the elongated structure when receiving impact by vehicle or the like.

22. A method of mounting a high impact gate in accordance with claim 21 wherein the buttresses are mounted to solid weighted bases.

23. A method of mounting a high impact gate accordance with claim 21 or 22 wherein the buttresses have an outwardly angled supporting structure having a base portion further from the lower structure than a top portion to provide the supporting structure while also providing a deflection mechanism to impact vehicles.